

**National Transportation Safety Board  
Washington, DC 20594**

**Brief of Accident**

**Adopted 04/18/2003**

DEN02LA096 File No. 12976	08/16/2002	Boulder, CO	Aircraft Reg No. N9791P	Time (Local): 13:40 MDT		
Make/Model:	Piper / PA-25-235			Fatal	Serious	Minor/None
Engine Make/Model:	Lycoming / O-540-GIAS		Crew	0	0	1
Aircraft Damage:	Destroyed		Pass	0	0	0
Number of Engines:	1					
Operating Certificate(s):	None					
Type of Flight Operation:	Other Work Use					
Reg. Flight Conducted Under:	Part 91: General Aviation					
Last Depart. Point: Same as Accident/Incident Location				Condition of Light: Day		
Destination: Local Flight				Weather Info Src: Weather Observation Facility		
Airport Proximity: Off Airport/Airstrip				Basic Weather: Visual Conditions		
				Lowest Ceiling: None		
				Visibility: 50.00 SM		
				Wind Dir/Speed: 230 / 010 Kts		
				Temperature (°C): 37		
				Precip/Obscuration: None / None		
Pilot-in-Command	Age: 38			Flight Time (Hours)		
Certificate(s)/Rating(s)				Total All Aircraft: 1417		
Flight Instructor; Commercial; Multi-engine Land; Single-engine Land				Last 90 Days: 242		
Instrument Ratings				Total Make/Model: 228		
Airplane				Total Instrument Time: 68		

The pilot said that he checked his flight time and fuel gauges (including fuel low level indicator light) before takeoff. While towing a glider, he experienced fuel exhaustion. He performed a forced landing to an open field, but the wind changed from a estimated 15 to 20 knots to no wind situation when he got close to the ground. The airplane stalled from about 8 or 10 feet, hit the ground, and nosed over. The engine was crushed back, and the left wing was separated from the fuselage. The calculated density altitude was 11,361 feet.

Brief of Accident (Continued)

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Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: CLIMB

Findings

1. FLUID,FUEL - EXHAUSTION
2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

3. (F) WEATHER CONDITION - OTHER
4. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
5. STALL/MUSH - INADVERTENT - PILOT IN COMMAND
6. (F) TERRAIN CONDITION - NONE SUITABLE

Findings Legend: (C) = Cause, (F) = Factor

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The National Transportation Safety Board determines the probable cause(s) of this accident as follows.  
the pilot's inadequate preflight preparation, which resulted in fuel exhaustion and a subsequent loss of engine power, and his failure to maintain adequate airspeed during the forced landing, which resulted in an inadvertent stall/mush. Factors included the changing wind conditions, the high density altitude, and the lack of suitable terrain for a forced landing.